

I claim:

1. A method for providing custom-engineered products, comprising:  
providing an online catalog having an unavailable product/attribute selector;  
receiving a selection of an unavailable product/attribute that requires one or more of  
engineering and testing before it may be produced.
2. The method of claim 1, further comprising:  
suggesting an existing/standard product based upon and as a replacement for the  
selection.
3. The method of claim 1, further comprising:  
determining a resource cost for the unavailable product/attribute.
4. The method of claim 1, further comprising:  
assigning a category of design requirements to the unavailable product/attribute.
5. The method of claim 4, further comprising:  
determining a resource cost for the unavailable product/attribute;  
assigning a first category to the unavailable product/attribute if the resource cost is  
relatively lower;  
assigning a second category to the unavailable product/attribute if the resource cost is

6 relatively higher.

1 6. The method of claim 4, further comprising:  
 2 transmitting a request for the unavailable product/attribute to an address associated with  
 3 the assigned category.

1 7. The method of claim 6, further comprising:  
 2 transmitting the request to a manufacturing facility for the unavailable product/attribute if  
 3 it is assigned to a first predefined category.

1 8. The method of claim 6, further comprising:  
 2 transmitting the request to an engineering department for the unavailable product/attribute  
 3 if it is assigned to a second predefined category.

1 9. The method of claim 1, further comprising:  
 2 providing a list of available products in the online catalog.

1 10. The method of claim 1, further comprising:  
 2 obsoleting an available product by moving it from the list of available products to a list of  
 3 unavailable products.

1 11. The method of claim 1, further comprising:  
 2 receiving an order of an available product and transmitting a request to a manufacturing

facility.

12. The method of claim 1, wherein the unavailable product/attribute selector comprises a list of unavailable products/attributes.

13. The method of claim 12, further comprising:  
classifying an item in the list of unavailable products/attributes.

14. The method of claim 1, wherein the unavailable product/attribute selector comprises an online form.

15. A method for providing available and unavailable products/attributes and for operating an associated computer system having at least one of each of the following:

a central processing unit (CPU);

a visual interface in communication with the CPU;

a memory in communication with the CPU; and

a user interface selection device in communication with the CPU;

the method comprising:

displaying a list of available products, stored in a memory of the computer system,

on a visual interface of the computer system; and

providing an unavailable product/attribute selector in the computer system.

16. The method of claim 15, further comprising:

storing in a memory of the computer system a list of unavailable products/attributes.

17. The method of claim 16, further comprising:

displaying the list of unavailable products/attributes on a visual interface of the computer system.

18. The method of claim 16, further comprising:

storing in a memory of the computer system a category of design requirements associated with the unavailable products/attributes.

19. The method of claim 15 further comprising:

receiving a selection of an unavailable product/attribute via a selection signal from a user interface selection device of the computer system; and

displaying a resource cost to the unavailable product/attribute on a visual interface of the computer system.

20. The method of claim 15 further comprising:

receiving a selection of an unavailable product/attribute via a selection signal from a user interface selection device of the computer system; and

identifying, by a CPU of the computer system, one or more available products, from the list of available products, that has similar characteristics to those of the selected unavailable product/attribute; and

displaying the identified one or more available products on a visual interface of the

8 computer system.

1 21. The method of claim 15 further comprising:

2 generating a specification for a product in response to receiving, by a CPU of the  
3 computer system, a selection signal from the user interface selection device of an  
4 unavailable product/attribute.

1 22. The method of claim 21, further comprising:

2 transmitting from a CPU of the computer system via electronic transmission a signal  
3 representative of the specification.

1 23. The method of claim 21, further comprising:

2 providing a list of resources in a memory of the computer system; and  
3 allocating the list of resources using a CPU of the computer system, the allocation based,  
4 at least in part, upon the specification.

1 24. The method of claim 21, further comprising using a CPU of the computer system for:

2 comparing the specification to the list of available products;  
3 selecting an available product, from the list of available products, that has similar  
4 characteristics to those of the specification; and  
5 identifying a base material common to the specification and the selected available  
6 product.

1 25. The method of claim 24, further comprising:

2 providing a list of base materials associated with the available products in a memory of  
3 the computer system.

1 26. The method of claim 24 further comprising:

2 transmitting from a CPU of the computer system via electronic transmission a signal  
3 representative of the base materials identified in the identification step.

1 27. The method of claim 21, further comprising using at least one CPU of the computer  
2 system for:

3 comparing the specification to the list of available products;

4 selecting an available product, from the list of available products, that has similar  
5 characteristics to those of the specification; and

6 determining a variance between the specification and the selected available product.

1 28. The method of claim 27, further comprising using a CPU of the computer system for:

2 assigning a category of design requirement to the variance.

1 29. The method of claim 28, further comprising:

2 transmitting from a CPU of the computer system via electronic transmission a signal  
3 representative of the specification to an address associated with the assigned  
4 category.

1 30. The method of claim 29 further comprising:

2 receiving a selection of an unavailable product/attribute via a selection signal from the  
 3 user interface selection device;  
 4 storing a resource cost heuristic in a memory of the computer system;  
 5 calculating a resource cost for the unavailable product/attribute based on the selected  
 6 unavailable product/attribute and the resource cost heuristic using a CPU of the  
 7 computer system.

1 31. The method of claim 29 further comprising:

2 receiving a selection of an unavailable product/attribute via a selection signal from a user  
 3 interface selection device of the computer system; and  
 4 using a CPU of the computer system for:  
 5 calculating a resource cost for the unavailable product/attribute;  
 6 comparing the resource cost to a list of available resources;  
 7 making an accept/reject decision.

1 32. The method of claim 29 further comprising:

2 storing in a memory of the computer system a list of unavailable products; and  
 3 moving an item from the list of available products to a list of unavailable products using a  
 4 user interface selection device of the computer system.

1 33. The method of claim 29 further comprising:

2 receiving a selection of an unavailable product/attribute via a selection signal from a user

interface selection device of the computer system; and  
transmitting from a CPU of the computer system via electronic transmission a signal  
representative of a request for quotation.

34. A method for offering products, comprising:

providing a set of available product data records in a memory, each available product data  
record containing a specification for an associated available product;  
providing a set of unavailable product data records in the memory, each unavailable  
product data record containing a specification for an associated unavailable  
product;  
displaying the set of available product data records and the set of unavailable product data  
records on a visual display;  
receiving an input, via a user interface selection device, of a user selection from the set of  
unavailable product data records.

35. The method of claim 34 wherein at least one of the unavailable product data records is a  
variance from an available product data record.

36. The method of claim 34 wherein at least one of the unavailable product data records  
represents an existing, but untested, product.

37. A method for offering custom products, comprising:

receiving into a processor an input, via a user interface selection device, of a specification



for an unavailable product;  
 executing a resource costing module in the processor to determine the resource cost for  
 creating the unavailable product;  
 transmitting from the processor via electronic transmission a price based upon the  
 resource cost.

38. A method for offering products, comprising:

providing a set of available product data records in a memory, each available product data  
 record containing a specification for an associated available product;  
 providing a set of variance data records in the memory, each variance data record  
 containing an allowed variance to an associated available product;  
 displaying the set of available product data records and the set of variance data records on  
 a visual display;  
 receiving an input, via a user interface selection device, of a user selection from the set of  
 variance data records.

39. A memory structure implemented in a computer system, comprising:

a read/write memory device coupled to the computer system providing the memory  
 structure;  
 an available product list implemented in the read/write memory;  
 an unavailable product/attribute selector implemented in the read/write memory allowing  
 selection of products/attributes not currently available from a given provider.

1 40. The memory structure of claim 39, wherein the unavailable product/attribute selector is  
2 an unavailable product/attribute list.

1 41. The memory structure of claim 39, wherein the unavailable product/attribute selector  
2 comprises an unavailable product/attribute request form.